

We claim:

Sub 1  
1. A non-lethal, mutant seed of a cereal plant species having at least 5% by weight oil, at least 11% by weight protein, and at least a one third reduction in the phytic acid amount relative to wild-type seed of said species.

Sub 2  
2. A seed according to claim 1 having at least 5% oil and at least 13% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

3. A feed comprising a seed according to claim 1, and at least one source of vitamins or minerals; said feed providing a nutritionally balanced diet and a greater amount of phosphorus to an animal consuming said feed than does the same feed formed with wild-type seed of said species.

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4. A feed comprising a seed according to claim 2, and at least one source of vitamins or minerals; said feed providing a nutritionally balanced diet and a greater amount of phosphorus to an animal consuming said feed than does the same feed formed with wild-type seed of said species.

5. A feed according to claim 3 wherein the vitamins and mineral source includes calcium, phosphorus and salt.

6. A feed according to claim 3 wherein the vitamins and mineral source includes at least one of vitamin A and vitamin D.

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7. A feed according to claim 3 wherein the vitamins and mineral source includes vitamins selected from the group comprised of: vitamin E, B<sub>12</sub>, riboflavin, pantothenic acid, niacin, biotin.
8. A feed according to claim 3 wherein the vitamins and mineral source includes trace mineral selected from the group comprised of: iron, copper, manganese, zinc, iodine, selenium.
9. A feed according to claim 3, further comprising feed additives selected from the group comprising: antibiotics, arsenicals, chemotherapeutics, flavoring, antioxidants and plant extracts.
10. A feed according to claim 3 wherein the feed is supplemented with the amino acid lysine. A
11. A feed according to claim 3 wherein the feed is supplemented with the amino acid is methionine.
12. A feed according to claim 3 wherein the components are formulated for the dietary requirements of swine.
13. A feed according to claim 3 wherein the components are formulated for the dietary requirements of poultry.
14. A seed according to claim 1 selected from the group consisting of maize seed, rice seed, soy seed and barley seed.

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~~15.~~ A method of increasing bioavailability of phosphorus from products containing wild-type seed of a species, said method comprising the steps of providing a seed containing product for consumption, wherein said seed containing product comprises a seed of claim 1, feeding said seed containing product to an animal which will benefit from an increased bioavailability of phosphorus.

16. Germplasm which will yield the corn grain of claim 1.

Sub A5 }  
17. A plant produced from a seed according to claim 1.

18. A seed according to claim 1 wherein said seed is fully mature.

~~19.~~ Inbred line UO95py

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20. A hybrid formed from crossing inbred UO95py with an inbred corn line.

Sub A6 }  
21. A seed according to claim 1 having at least 6% oil and at least 9% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

~~22.~~ A non-lethal, mutant seed of a cereal plant species having at least 5% by weight oil and at least a one third reduction in the phytic acid amount relative to wild-type seed of said species.

Sub A7 }  
23. A seed according to claim 1 having at least 6% oil and at least 9% protein and said reduction in the amount of phytic acid is at least half relative to wild-type seed of said species.

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